that this species was also non-migratory and flew exclusively between the slopes ti avoid threats. Hume & Marshall (1879) supposed that the species was a wintering guest at its collection sites, being a migrating species from unknown breeding places. But the shape of the wings tells us that the flight was of an explosive, vertical type with sequences of short wing beats interrupted by gliding. The wing of *Ophrysia* was broader than in *A. mandelli* – 83.6 % and 79.2 % of the wing length of the latter.

Applications of the proposed method may be much wider, in particular for the study of the ontogenetic development of flight characteristics of different species or to discover intersexual differences in life style etc. In comparative analyses one should use specimens with the same degree of abrasion of feathers and in comparisons between populations one should take into account that differences in the wing shape will be stronger in more isolated populations. In recent years, special formulae have been developed which can help to calculate the degree of sharpness (Tsvelykh 1983). When someone uses such formulae he should take into consideration that such a formula neglects many peculiarities of wing shape, and this may lead to loss of important information.

3. SCALATION OF THE LEG

Gadow (1891-93) was the first to stress the high taxonomic importance of leg scalation in birds, but later this character was not regularly examined, so that phylogenetic studies only rarely mentioned this feature (for instance, for the reconstruction of phylogenetic relations of the family Tetraonidae (Potapov 1965)).

The variability of foot scalation, in particular within the ancient order Galliformes forced us to examine the diversity of this trait for different taxa. This work is still far from completion, but some conclusions can already be ruled out. The scalation of the leg proved indeed to be very stable within a species or within a genus (provided that monophyly of a genus is evident). A complete absence of variation in leg scalation was shown within the genera *Alectoris, Arborophila, Tetraogallus, Perdix*, as well as for the entire family of Tetraonidae and, with one or two exceptions, in the families Numididae and Odontophoridae. On the other hand, within the largest genus of Galliformes, *Francolinus*, we discovered several types of scalation (Fig. 5), which is already published (Potapov 1999). This fact supports the polyphyletic origin of the genus (Crove et al. 1992). Currently, we are preparing a special publication on this subject.

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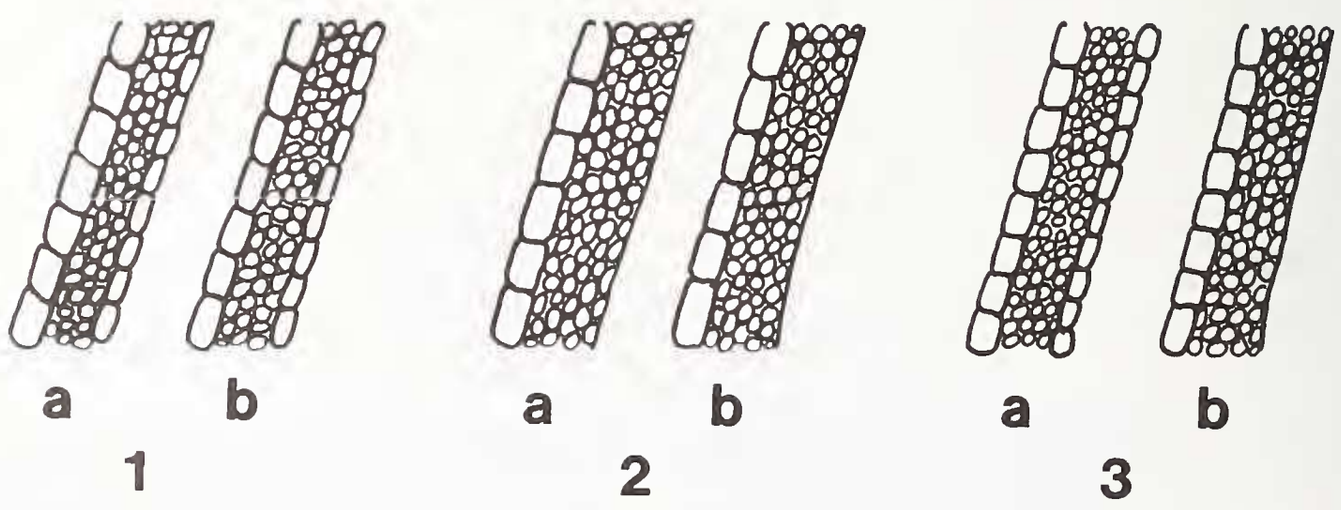

Fig. 5: Three main types of tarsi scalation in *Francolinus*:
a - in outer side,
b - in inner side.

Type 1 (most of the species) - with two back rows of scales, larger than in nearest, but smaller than the scales in two frontal rows.

Type 2 - without back rows of larger scales than on the sides of the tarsus. The spurs are not shown.

Type 3 - with only one back row.